

Claims

1. A detergent composition for CIP, which comprises (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant.

2. The detergent composition for CIP according to claim 1, wherein the solvent (A) is at least one member selected from C5 to C24 hydrocarbon compounds.

3. The detergent composition for CIP according to claim 1, wherein the solvent (A) is at least one member selected from C5 to C20 aliphatic hydrocarbons.

4. The detergent composition for CIP according to any one of claims 1 to 3, wherein the SP value of the solvent (A) at 25°C is 7 to 8.

5. The detergent composition for CIP according to any one of claims 1 to 4, wherein the surfactant (B) is at least one member selected from nonionic surfactants.

6. A CIP cleaning method which comprises the step of contacting a cleaning medium (I) comprising (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant with a material to be cleaned.

7. The CIP cleaning method according to claim 6, wherein the cleaning medium (I) comprising (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant is added to, and used in, an alkali detergent in a CIP process.

8. The CIP cleaning method according to claim 6, wherein the cleaning medium (I) comprising (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant is added to, and

used in, an acid detergent in a CIP process.

9. The CIP cleaning method according to claim 6, wherein the cleaning medium (I) comprising (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant is added to, and used in, cleaning water in a CIP process.

10. The CIP cleaning method according to any one of claims 6 to 9, which comprises a step (1) of contacting, at 60°C or more, a cleaning medium (I) comprising (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant with a material to be cleaned.

11. The CIP cleaning method according to any one of claims 6 to 10, wherein the content of the solvent (A) is 0.01 to 20 wt%, and the content of the surfactant (B) is 0.01 to 20 wt%.

12. A CIP cleaning method which comprises a step (1) of contacting a cleaning medium (I) comprising (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant with a material to be cleaned and, thereafter, a step (2) of contacting a cleaning medium (II) comprising (A) a solvent having an SP value of 6 to 9 at 25°C at a concentration of less than 0.5 wt%, and (B) a surfactant, with the material to be cleaned.

13. The CIP cleaning method according to claim 12, which comprises the step (1) of adding the cleaning medium (I) comprising (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant to an alkali detergent in a CIP process, to contact it with a material to be cleaned, and, thereafter,

the step (2) of adding the cleaning medium (II) comprising (A) a solvent having an SP value of 6 to 9 at 25°C at a concentration of less than 0.5 wt% and (B) a surfactant to an acid detergent in a CIP process to contact it with the material to be cleaned.

14. The CIP cleaning method according to claim 12 or 13, which comprises the step (1) of contacting, at 60°C or more, the cleaning medium (I) comprising (A) a solvent having an SP value of 6 to 9 at 25°C and (B) a surfactant with a material to be cleaned, and, thereafter, the step (2) of contacting, at 60°C or more, the cleaning medium (II) comprising (A) a solvent having an SP value of 6 to 9 at 25°C at a concentration of less than 0.5 wt% and (B) a surfactant with the material to be cleaned.

15. The CIP cleaning method according to any one of claims 12 to 14, which comprises the step (2) of contacting a cleaning medium (I) comprising the solvent (A) in an amount of 0.01 to 20 wt% and the surfactant (B) in an amount of 0.01 to 20 wt% and a cleaning medium (II) comprising the surfactant (B) in an amount of 0.01 to 30 wt%, which step (2) is carried out after the step (1).

16. The CIP cleaning method according to any one of claims 6 to 15, wherein the surfactant (B) used in the step (1) or at least one of the surfactants (B) used in the steps (1) and (2), respectively, is selected from nonionic surfactants.

17. The CIP cleaning method according to any one of claims 6 to 16, which comprises a step of judging acceptance

or rejection by sensory evaluation of a rinse after the cleaning medium (I) or the cleaning mediums (I) and (II) have been used.

18. The CIP cleaning method according to any one of claims 6 to 17, wherein the cleaning solution comprising the cleaning medium (I) or (II) is flowed at a flow rate of 0.5 to 5 m/sec.

19. Use of the composition of claim 1 for CIP cleaning.

20. A method of cleaning an object of CIP with the composition of claim 1.